

## ABSTRACT

A method for estimating end-to-end quality of service (QOS), such as packet loss, delay, and delay jitter, in a packet-switched communications network includes steps for calculating packet loss and packet delay each router output link in a network path and using the packet loss and packet delay calculations for each individual router output link to estimate end-to-end QOS. The method includes calculating the loss probability for all possible numbers of active sources to take into account changes in the number of active sources as active sources connect to and disconnect from the network. As a result, the inventive method allows the number of active sources to vary in its estimation of end-to-end packet loss, delay, and delay jitter for enhanced Internet Protocol network planning.

006260 "E202960